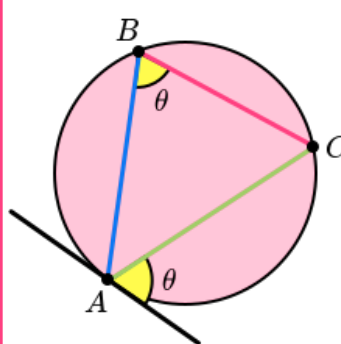


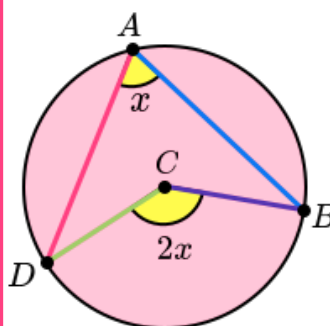
Circle Theorems

Alternate segment theorem



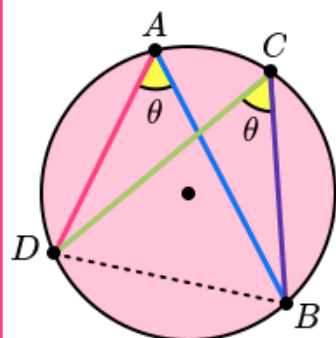
The angle that lies between a tangent and a chord is equal to the angle subtended by the same chord in the alternate segment.

Angle at the centre theorem



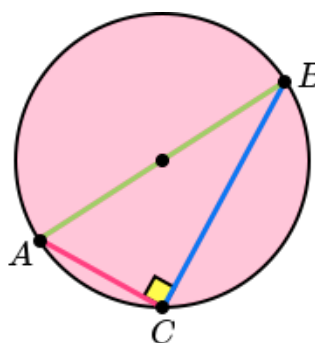
The angle at the centre is twice the angle at the circumference.

Angles in the same segment theorem



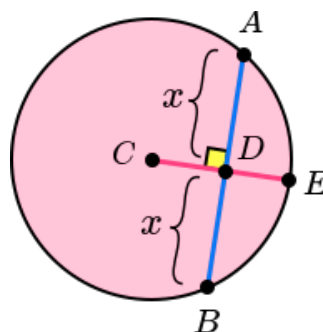
Angles in the same segment are equal.

Angles in a semicircle



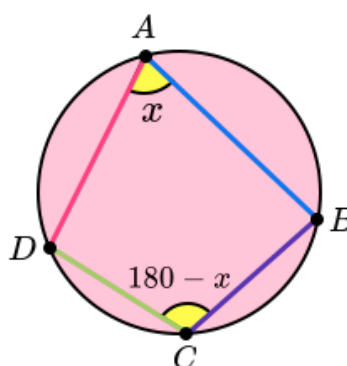
The angle in a semicircle is 90 degrees.

Chord of a circle



The perpendicular from the centre of a circle to a chord bisects the chord (splits the chord into two equal parts).

Cyclic quadrilateral



The opposite angles in a cyclic quadrilateral total 180° .

Tangent of a circle

Diagram A

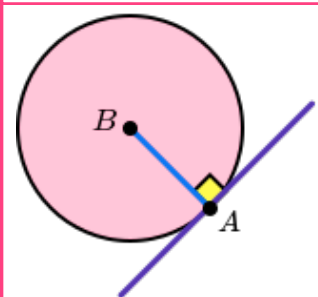
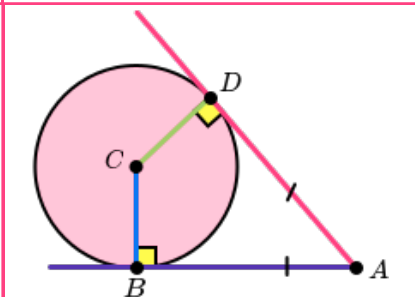


Diagram B



A. The angle between a tangent and radius is 90 degrees.
B. Tangents which meet at the same point are equal in length.

